

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF INDIANA
Evansville Division

UNITED STATES OF AMERICA,)	
)	
and)	
)	
THE STATE OF INDIANA)	
)	
Plaintiffs,)	
)	
v.)	CIVIL ACTION NO.
)	
)	
TOWN OF NEWBURGH, INDIANA,)	
)	
Defendant.)	
_____)	

CONSENT DECREE

The United States of America (the "United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), and the State of Indiana (the "State"), on behalf of the Commissioner of the Indiana Department of Environmental Management ("IDEM") (collectively the "Plaintiffs") have filed a complaint alleging that the defendant, the Town of Newburgh, Indiana, has violated and continues to violate Section 301 of the Clean Water Act, 33 U.S.C. § 1311, and the terms and conditions of the National Pollutant Discharge Elimination System ("NPDES") Permit issued to the Town of Newburgh by IDEM.

Without admitting any liability, the Town of Newburgh agrees to undertake the compliance measures set forth in this Decree and also agrees to pay a civil penalty for alleged past violations.

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW THEREFORE, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action and over the parties pursuant to Sections 309 and 505(a) of the Act, 33 U.S.C. §§ 1319, 1365(a), and 28 U.S.C. §§ 1331, 1345, 1355, and 1367. Venue is proper pursuant to Sections 309 and 505(c) of the Act, 33 U.S.C. §§ 1319(b), 1365(c), and 28 U.S.C. §§ 1391(b) and (c) and 1395(b). The Complaint of the United States and the State of Indiana states claims upon which relief may be granted under Section 309 of the Act, 33 U.S.C. § 1319, and Section 505 of the Act, 33 U.S.C. 1365.

II. BINDING EFFECT

1. This Decree, after entry, shall apply to and be binding on the United States, the State of Indiana, and the Town of Newburgh, and on the Town of Newburgh's elected officials, officers, council members, directors, agents, trustees, employees, successors, assigns, and all

persons, firms, and corporations acting under the control, authority, or direction of the Town of Newburgh. The Town of Newburgh shall provide a copy of this Consent Decree to all contractors and subcontractors hired to perform any portion of the work required under this Consent Decree and shall make performance of work consistent with this Decree a condition of any contract to perform work required by this Decree. The Town of Newburgh shall ensure that its contractors and subcontractors perform the work required by this Decree in accordance with the deadlines and requirements in this Decree and any attachments. Nothing shall relieve the Town of Newburgh of its obligation to comply with this Decree and the terms and conditions of its NPDES Permit. The signatory for the Town of Newburgh represents that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to bind the Town of Newburgh legally.

III. DEFINITIONS

1. Unless otherwise defined in this Decree, the terms used in this Decree shall have the same meaning given to those terms in the Clean Water Act, 33 U.S.C. §§ 1251-1387, the regulations promulgated under the Clean Water Act, and the Town of Newburgh's NPDES Permit.

(a) "NPDES Permit" means that version of the Town of Newburgh's NPDES Permit No. IN 0023892, including any modifications, renewals, or successors to such permit, that is applicable and in effect during the term of this Consent Decree;

(b) "Sanitary sewer overflow" or "SSO" means an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. SSOs include: (i) overflows or releases of

wastewater that reach waters of the United States and/or waters of the State of Indiana; (ii) overflows or releases of wastewater that do not reach waters of the United States or waters of the State of Indiana; and (iii) wastewater backups into buildings that are caused by blockage or flow conditions in a sanitary sewer other than a building lateral.

IV. COMPLIANCE PROGRAM

2. **NPDES Permit Compliance** The Town of Newburgh shall comply with the Clean Water Act, 33 U.S.C. § 1281 et seq., and all requirements contained in its NPDES Permit.

3. **Completion of Work** The Town of Newburgh has addressed alleged effluent limitation and sanitary sewer overflow violations of its NPDES Permit through the completion of several construction projects: (a) the elimination of Outfall 011 to Cypress Creek; (b) the major upgrade of the wastewater treatment plant's capacity from 2.3 million gallons per day ("MGD") to 4.6 MGD; (c) the provision of alternate power supply to the No. 5 (Triple Crown) and No. 8 (Old Plant) Lift Stations; (d) replacement of pumps and controls at the Old Plant Lift Station; (e) the construction of an new 18 inch gravity sewer connected to the Old Plant Lift Station; and (f) the closing and sealing of Outfall 009.

4. **Capacity, Management, Operation, and Maintenance Plan** The Town of Newburgh has developed a written capacity, management, operation, and maintenance ("CMOM") plan, which the Plaintiffs have approved, for the sewer collection system that Newburgh owns or over which Newburgh has operational control. The approved CMOM plan is attached as Appendix A and is incorporated by reference. Within thirty (30) days after entry of

this Consent Decree, the Town of Newburgh shall begin full implementation of the measures and activities in the approved CMOM plan in accordance with the schedule set forth therein.

5. **CMOM Program Audit** Newburgh must conduct an audit of the first full calendar year of implementation of the approved CMOM plan and submit a written report of such audit (the “audit report”), evaluating Newburgh’s compliance with all plans, procedures, requirements, standards, and schedules set forth in the approved CMOM plan, to the Plaintiffs for approval. Newburgh must submit the audit report for approval no later than March 31 of the year following the first full calendar year after entry of this Consent Decree. The audit report shall include a schedule with deadlines which shall be incorporated by reference into this Consent Decree, of steps that Newburgh will take to rectify any identified deficiencies. The audit report’s schedule to rectify identified deficiencies shall not extend for more than 5 years. Within thirty (30) days of approval or modification by the Plaintiffs of the audit report, the Town of Newburgh shall begin implementation of the recommendations in the final audit report in accordance with the schedule set forth therein. The Town of Newburgh shall make the final approved audit report available to any member of the public upon request.

6. **Prohibition on Municipal Sanitary Sewer System Discharges** Sanitary sewer overflows that discharge to waters of the United States and/or waters of the State of Indiana that occur from Newburgh’s sewer collection system are prohibited. Neither the bypass or the upset provisions at 40 C.F.R. § 122.41(m) and (n) apply to these discharges.

7. **Review by the Plaintiffs of Submissions Made Pursuant to Section IV**

(Compliance Program)

(a). After review of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Decree, the Plaintiffs shall: (1) approve, in whole or in part, the submission; (2) approve, in whole or in part, the submission upon specified conditions; (3) modify the submission to cure the deficiencies; (4) disapprove, in whole or in part, the submission, directing that the Defendant modify the submission; or (5) any combination of the above. However, the Plaintiffs shall not modify a submission without first providing Defendant at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Compliance Program or where previous submission(s) have been disapproved due to material defects and the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

(b) In the event of approval, approval with conditions, or modification by the Plaintiffs, pursuant to Paragraph 9(a)(1), (2), or (3), Defendant shall proceed to take any action required by the plan, report, or other item, as approved or modified by the Plaintiffs subject only to their right to invoke the Dispute Resolution procedures set forth in Section IX (Dispute Resolution) with respect to the modifications or conditions made by the Plaintiffs. In the event that the Plaintiffs modify the submission to cure the deficiencies pursuant to Paragraph 9(a)(3) and the submission has a material defect, the Plaintiffs retain their rights to seek stipulated penalties, as provided in Section VII (Stipulated Penalties).

(c) Resubmission of Plans. Upon receipt of a notice of disapproval pursuant to Paragraph 9(a)(4), Defendant shall, within 30 days or such longer time as specified by Plaintiffs in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section VII, shall accrue during the 30-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraph 9(a) and (b).

(d) Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 9(a)(4), Defendant shall proceed, at the direction of Plaintiffs, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Defendant of any liability for stipulated penalties under Section VII (Stipulated Penalties).

(e) In the event that a Plaintiffs do not approve a resubmitted plan, report or other item, or portion thereof, Plaintiffs may again require the Defendant to correct the deficiencies, in accordance with the preceding Paragraphs. The Plaintiffs also retain the right to modify or develop the plan, report or other item. Defendant shall implement any such plan, report, or item as modified or developed by Plaintiff, subject only to their right to invoke the procedures set forth in Section IX (Dispute Resolution).

(f) If upon resubmission, a plan, report, or item is not approved or is modified by Plaintiffs due to a material defect, Defendant shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the Defendant invokes the dispute resolution

procedures set forth in Section IX (Dispute Resolution) and the Plaintiffs' action is overturned pursuant to that Section. The provisions of Section IX (Dispute Resolution) and Section VII (Stipulated Penalties) shall govern the implementation of the Compliance Program and accrual and payment of any stipulated penalties during Dispute Resolution. If Plaintiffs' disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section IX.

(g) All plans, reports, and other items required to be submitted to Plaintiffs under this Consent Decree shall, upon approval or modification by Plaintiffs, be enforceable under this Consent Decree. In the event Plaintiffs approve or modify a portion of a plan, report, or other item required to be submitted to Plaintiffs under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

8. Within ten (10) days following the deadline or schedule for any requirement under this Section (Compliance Program), the Town of Newburgh shall notify the Plaintiffs in writing of any noncompliance with the requirement, the reasons for any noncompliance, and a plan for preventing such noncompliance in the future. Notification under this Paragraph shall not excuse any failure to comply with this Decree.

V. REPORTING

9. Beginning with the first full calendar year that ends after the date of entry of this Decree and for every following calendar year until this Decree terminates, the Town of Newburgh shall submit to the Plaintiffs an annual written CMOM plan progress report. The Town of Newburgh shall submit each annual report no later than March 31 of the year following

the calendar year that is the subject of the annual report. The Town of Newburgh shall make each report available for public inspection at the Town of Newburgh's offices. The annual report must describe Newburgh's progress toward rectifying the deficiencies identified in the approved audit report. Each annual report shall contain the following information for that year:

- (a) the status and progress of projects scheduled to rectify deficiencies identified in the approved audit report under Paragraph 7 of this Decree;
- (b) a projection of the work to be performed to rectify deficiencies identified in the approved audit report under Paragraph 7 of this Decree during the next year;
- (c) identification of any items that might affect timely completion of projects scheduled to rectify deficiencies identified in the approved audit report under Paragraph 7 of this Decree;
- (d) a description of all efforts the Town of Newburgh will undertake to minimize any anticipated delays in the timely completion of projects scheduled to rectify deficiencies identified in the approved audit report under Paragraph 7 of this Decree; and
- (e) any evidence of noncompliance with this Decree and all reasons for such noncompliance.

Notification under this Paragraph shall not excuse any failure to comply with this Decree.

10. The Town of Newburgh shall report discharges to waters of the United States and/or waters of the State of Indiana from sanitary sewer overflows on the monthly discharge monitoring report ("DMR"). The Town of Newburgh shall submit monthly DMRs and monthly reports of operation ("MROs") to U.S. EPA at the same time the Town of Newburgh is required to submit those reports to the Indiana Department of Environmental Management.

11. The Town of Newburgh shall submit to U.S. EPA any written notice or report regarding overflows or bypasses required by the Town of Newburgh's NPDES Permit at the

same time the Town of Newburgh is required to submit the notice or report to the Indiana Department of Environmental Management.

12. **Record Keeping.** Newburgh shall maintain a record of the following information for a period of at least three years after the date of the SSO or other event which is required to be recorded under this Paragraph:

- (a) for each SSO which occurred in Newburgh's collection system or as a result of conditions in a portion of the collection system:
 - (i) the location of the SSO and the receiving water, if any;
 - (ii) an estimate of the volume of the SSO;
 - (iii) a description of the sewer system component from which the SSO occurred, including but not limited to, manholes, constructed overflow pipe, and pipe cracks;
 - (iv) the estimated date and time when the SSO began and when it stopped;
 - (v) the cause or the suspected cause of the SSO; and
 - (vi) steps that have been and will be taken to prevent the SSO from recurring and a schedule for those steps.
- (b) work orders associated with the investigation and/or correction of system problems related to SSOs; and
- (c) a list and description of complaints regarding SSOs from customers or others.

13. **Immediate Notifications and Follow-Up Reports.** Newburgh shall provide the following additional reports for SSOs that may imminently and substantially endanger human health:

- (a) Newburgh shall immediately notify the public, health agencies, drinking water suppliers and other affected entities of such SSOs. The notice shall be in accordance with the approved CMOM plan attached as Appendix A to this Consent Decree;
- (b) Newburgh shall provide to the Plaintiffs either an oral or electronic report within 24 hours after the time Newburgh becomes aware of the SSO. The

report shall identify the location, estimated volume and receiving water, if any, of the SSO; and

- (c) Newburgh shall provide to the Plaintiffs within 5 days of the time Newburgh became aware of the SSO a written report that contains:
 - (i) the location of the SSO;
 - (ii) the receiving water, if any;
 - (iii) an estimate of the volume of the SSO;
 - (iv) a description of the sewer system component from which the release occurred, including, but not limited to, manholes, constructed overflow pipe, and pipe cracks;
 - (v) the estimated date and time when the SSO began and stopped or will be stopped;
 - (vi) the cause or suspected cause of the SSO;
 - (vii) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the SSO and a schedule of major milestones for those steps; and
 - (viii) steps taken or planned to mitigate the impacts of the SSO and a schedule of major milestones for those steps.
- (d) Upon Newburgh's request, the Plaintiffs may waive the written report required in Paragraph 15(c) on a case-by-case basis.

14. **Annual Report.** Beginning with the first full calendar year that ends after the date of entry of this Consent Decree and for every following calendar year until this Consent Decree terminates, Newburgh shall prepare an annual report of all SSOs from Newburgh's sewer collection system, including the date, the location of the SSO, any potentially affected receiving water, and the estimated volume of the SSO. No later than March 31 of the year following the calendar year that is the subject of the annual report the report, the Town of Newburgh shall submit the annual report to the Plaintiffs and provide notice to the public of the availability of the report.

15. In addition to all reporting requirements set forth in this Decree, Newburgh shall continue to comply with all reporting requirements set forth in its NPDES Permit.

VI. CIVIL PENALTY

16. The Town of Newburgh shall pay a civil penalty in the amount of \$56,000 to the United States within thirty (30) days of the Court's entry of this Decree. Payment of this civil penalty resolves the civil claims of the United States and the State for the violations of the Clean Water Act set forth in the Complaint filed in this action, through the date of lodging this Decree. Payment shall be made by Fedwire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account in accordance with current electronic funds transfer procedures, referencing USAO file number, and DOJ case number 90-5-1-1-06644. Payment shall be made in accordance with instructions provided to the Town of Newburgh upon lodging of this Decree. Any EFTs received at the DOJ lockbox bank after 11:00 a.m. Eastern Time will be credited on the next business day. Within five (5) days of the date of payment, the Town of Newburgh shall send written notice of payment and a copy of any transmittal documentation to the United States in accordance with Section XIII (Notice) of this Decree.

17. Upon final entry of this Decree, the United States shall be deemed a judgment creditor for purposes of collection of this penalty and enforcement of this Decree. Interest shall accrue upon any balance unpaid after thirty (30) days from the entry of this Decree at the statutory judgment interest rate prescribed at 28 U.S.C. § 1961 in effect on the day this Decree is entered by the Court. Payment of interest made under this Paragraph shall be in addition to such

other remedies or sanctions available to the United States by virtue of the Town of Newburgh's failure to make timely payment under this Section.

VII. STIPULATED PENALTIES

18. If the Town of Newburgh fails to timely submit any report required by Paragraphs 11 through 16, the Town of Newburgh shall pay a stipulated penalty of two hundred fifty dollars (\$250) per day until the required report is submitted. Provided, however, the total stipulated penalties for a failure to submit a periodic report shall run only until the date that the next periodic report is submitted.

19. If the Town of Newburgh fails to comply with any daily minimum or maximum effluent limitation or monitoring requirement contained in its NPDES Permit, the Town of Newburgh shall pay the following stipulated penalties:

<u>Period of Failure to Comply</u>	<u>Stipulated Penalty</u>
1 st to 5 th violation in a month	\$500/day per violation
Any additional violations in a month	\$1,000/day per violation

20. If the Town of Newburgh fails to comply with any weekly average limitation in its NPDES Permit, the Town of Newburgh shall pay the following stipulated penalties:

<u>Period of Failure to Comply</u>	<u>Stipulated Penalty</u>
Any weekly average violations in one week	\$1,000 per violation
Any weekly average violations that continue beyond one week	\$3,000 per violation of weekly average per week beyond the first week of violation

21. If the Town of Newburgh fails to comply with any 30 day average (monthly average) limitation in its NPDES Permit, the Town of Newburgh shall pay the following stipulated civil penalties:

<u>Monthly Average Violations</u>	<u>Stipulated Penalty</u>
Any monthly average violations in one month	\$5,000 per violation of monthly average
Any monthly average violation that continues beyond one month	\$7,500 per violation of monthly average per month beyond the first month of violation

22. If the Town of Newburgh fails to comply with any deadline set forth, required, or incorporated by reference, in Paragraph 7 of this Consent Decree, the Town of Newburgh shall pay the following stipulated penalties:

<u>Period of Failure to Comply</u>	<u>Stipulated Penalty</u>
1 st to 30 th day	\$500 per day per violation
31 st to 60 th day	\$1,250 per day per violation
After 60 days	\$2,500 per day per violation

23. If the Town of Newburgh fails to comply with the prohibition on SSO discharges in Paragraph 8 of this Decree, the Town of Newburgh shall pay stipulated penalties of one thousand dollars (\$1,000) per day of violation.

24. The stipulated penalties under this Decree are in addition to other remedies or sanctions available to the Plaintiffs by reason of the Town of Newburgh's failure to comply with the requirements of this Decree, its NPDES Permit, or the Clean Water Act. Notwithstanding any other provision of this Section, the United States and the State of Indiana may, in their

unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree .

25. The Town of Newburgh shall pay any stipulated penalties due under this Decree as follows: The Town of Newburgh shall pay fifty percent (50%) of the penalty to the United States by certified or cashiers check payable to "Treasurer, United States of America," and shall tender payment to the United States Attorney for the Southern District of Indiana, U.S. Courthouse, 5th Floor, 46 East Ohio St., Indianapolis, IN 46204, and shall pay fifty percent (50%) of the penalty to the State of Indiana by certified or cashiers check payable to the "Environmental Management Special Fund" and shall tender payment to Cashier, IDEM, 100 North Senate Avenue, P.O. Box 7060, Indianapolis, IN 46207-7060. Newburgh shall pay any stipulated penalties within thirty (30) days of the date that the Town of Newburgh receives a written demand from U.S. EPA or the State of Indiana, unless the Town of Newburgh initiates dispute resolution in accordance with Section IX (Dispute Resolution) of this Decree, in which case such penalties shall be addressed in Paragraph 37. The Town of Newburgh shall send a copy or other evidence of any payment made pursuant to this Section to the United States and the State of Indiana at the addresses in Section XIII (Notice). With respect to the United States, interest shall accrue on any overdue amounts as provided in Paragraph 19 of this Decree. With respect to the State, interest shall accrue on any overdue amounts at the rate established by IC 24-4.6-1-101.

26. All stipulated penalties shall begin to accrue on the day after performance is due or on the day a violation occurs, and shall continue to accrue until the day compliance is

achieved. Nothing in this Decree prevents the simultaneous accrual of separate penalties for separate violations of this Decree.

27. No penalties or interest shall accrue for violation(s) of deadlines imposed by this Decree that were caused by events determined to be a force majeure pursuant to Section VIII (Delays or Impediments to Performance (*Force Majeure*)) of this Decree or with respect to matters in which the Town of Newburgh prevails in dispute resolution.

VIII. DELAYS OR IMPEDIMENTS TO PERFORMANCE (*Force Majeure*)

28. *Force Majeure* -- "Force Majeure" for the purposes of this Consent Decree is defined as an event arising from causes beyond the Town of Newburgh's control or the control of any entity controlled by the Town of Newburgh, including its consultants and contractors, which delays or prevents the performance of any obligation under this Consent Decree and which could not be overcome by due diligence. Unanticipated or increased costs or changed financial circumstances are not Force Majeure events. Failure to apply for a required permit or approval, or to provide in a timely manner all information required to obtain a permit or approval necessary to meet the requirements of this Consent Decree, are not Force Majeure events.

29. If any event occurs or has occurred that may delay the performance of any obligation under this Decree, whether or not due to a Force Majeure event, the Town of Newburgh shall notify in writing the Plaintiffs within ten days of when the Town of Newburgh first knows, or in the exercise of due diligence should have known, that the event is likely to cause a delay. The notice shall (i) refer to this Section of the Decree, (ii) describe in detail the anticipated length of time the delay may persist, (iii) describe the precise cause or causes of the

delay, (iv) describe the measures taken or to be taken by the Town of Newburgh to prevent or minimize the delay as well as to prevent future delays, and (v) set forth the schedule by which those measures will be implemented. The Town of Newburgh shall adopt all reasonable measures to avoid or minimize any such delay. Failure by the Town of Newburgh to comply with the notice requirements of this Section shall preclude the Town of Newburgh from asserting any claim of force majeure for that event for the period of time of such failure to comply.

30. If the Plaintiffs find that a delay or anticipated delay in performance is, or was, caused by a Force Majeure event, the time for performance may be extended for a period not to exceed the actual delay resulting from such event, and stipulated penalties shall not be due for such period. The Plaintiffs shall notify the Town of Newburgh in writing of the Plaintiffs' agreement or disagreement with the Town of Newburgh's claim of Force Majeure within 30 days of receipt of the Town of Newburgh's notice under Paragraph 31 of this Decree or within such additional time as the Plaintiffs may notify the Town of Newburgh is needed. If the Plaintiffs disagree with Newburgh's claim of Force Majeure, the Town of Newburgh may submit the matter to the Court for resolution pursuant to Section IX (Dispute Resolution) of this Decree. If the Town of Newburgh submits the matter to the Court for resolution and the Court determines that the delay was caused by a Force Majeure event, the Town of Newburgh shall be excused as to that delay but only for the period of time the delay continued or continues due to such circumstances.

31. Compliance with the terms of this Decree by the Town of Newburgh is not conditioned on the receipt of grant funds, loans, or outside sources of funding. In addition, any

failure of the Town of Newburgh to comply with the terms of this Decree shall not be excused by the lack of, or any delay in the processing of applications for grant funds, loans or outside sources of funding.

32. Compliance with any requirement of this Decree by itself shall not constitute compliance with any other requirement. An extension of one compliance date based on a particular incident shall not necessarily result in an extension of a subsequent compliance date or dates. The Town of Newburgh must make an individual showing of proof regarding each delayed incremental step or other requirement for which an extension is sought.

33. The Town of Newburgh shall bear the burden of proving that any delay or violation of any requirement of this Consent Decree was caused by a Force Majeure event. The Town of Newburgh shall also bear the burden of proving the duration and extent of any delay or violation attributable to such circumstances.

IX. DISPUTE RESOLUTION

34. The provisions of this Section shall be used to resolve any disputes between the Parties. If the Parties are unable to agree upon any requirement or other matter described in this Decree, or in the event a dispute should arise among the parties regarding the implementation of the requirements of this Decree, the Parties shall attempt to resolve the dispute through negotiation for at least fifteen (15) calendar days. The period for negotiations may be extended by agreement of the parties to this Decree. If the dispute is not resolved, any Party may apply to the Court for assistance in resolving the dispute within thirty (30) days from the close of informal negotiations. Any application to the Court shall set forth the nature of the dispute and a proposal

for resolution. The other Party shall have thirty (30) days to file a response. The legal standard applicable to any such dispute shall be the standard provided by applicable law.

35. The invocation of formal dispute resolution procedures under this Section shall not of itself extend or postpone any obligation of the Town of Newburgh under this Decree, but the payment of stipulated penalties with respect to the disputed matter shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties for which a demand has been tendered pursuant to Paragraph 27 shall continue to accrue from the first day of noncompliance with any provision of this Decree and shall be paid within fifteen (15) calendar days after the Court issues an order resolving the dispute in the Plaintiffs' favor or after the resolution in the Plaintiffs' favor of any appeal concerning the dispute. To the extent that the Town of Newburgh prevails on the disputed issue, stipulated penalties shall be excused.

X. RIGHT OF ENTRY

36. Commencing on the date of lodging of this Consent Decree, Newburgh agrees to provide the Plaintiffs and their representatives (including attorneys, contractors and consultants), access at all times to all areas and facilities under Newburgh's control, and to allow such representatives to move about, without restriction, for the purposes of conducting any activity related to this Consent Decree, including:

- (a) monitoring the progress of activities required by this Decree;
- (b) verifying any data or information submitted to the Plaintiffs in accordance with the terms of this Decree;
- (c) obtaining samples, and, upon request, splits of any samples taken by the Town of Newburgh or its consultants; and
- (d) assessing the Town of Newburgh's compliance with this Decree.

37. Notwithstanding any provision of this Decree, the Plaintiffs retain all access authorities and rights, including enforcement authorities related thereto, under the Clean Water Act and any other applicable statute or regulations.

XI. EFFECT OF DECREE

38. This Decree is not and shall not be interpreted to be a permit, or a modification of an existing permit, issued pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, nor shall it in any way relieve the Town of Newburgh of its obligation to obtain a permit and comply with the requirements of an NPDES permit or with any other applicable federal, state, or local law or regulation. Nothing in this Decree alters the Town of Newburgh's obligations to comply with any new permit or modification of existing permits, in accordance with applicable federal, state, and local laws and regulations.

39. This Decree in no way affects or relieves the Town of Newburgh of responsibility to comply with any federal, state, or local law or regulation. Nothing contained in this Decree shall be construed to prevent or limit the United States' or the State of Indiana's rights to obtain penalties or injunctive relief under the Act or other federal or state statutes or regulations except as expressly specified herein.

40. The Plaintiffs do not, by their consent to the entry of this Decree, warrant or aver in any manner that the Town of Newburgh's complete compliance with this Decree will result in compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., or any applicable discharge permit. Notwithstanding the Plaintiffs' review and approval of any submission formulated pursuant to this Decree, the Town of Newburgh shall remain solely

responsible for compliance with the terms of the Act, this Decree, and any other applicable law, including any discharge permit.

41. The Town of Newburgh is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits, and compliance with this Decree shall be no defense to any actions commenced pursuant to said laws, regulations, or permits.

42. This Decree does not limit or affect the rights of the Town of Newburgh, the State of Indiana, or the United States as against any third parties, nor does it limit the rights of third parties, not parties to this Decree, against the Town of Newburgh.

43. The United States and the State of Indiana reserve any and all legal and equitable remedies available to enforce the provisions of this Decree.

XII. COSTS OF SUIT

44. Each party shall bear its own costs and attorney's fees in this action.

XIII. NOTICE

45. Except as specified otherwise, when written notification to or communication with a party is required by the terms of this Decree, it shall be addressed as specified below. All notices and submissions shall be considered effective upon receipt.

As to the United States:

United States Attorney for
the Southern District of Indiana
10 West Market Street, Suite 2100
Indianapolis, IN 46204

and

United States Department of Justice
Environment and Natural Resources Division
DOJ # 90-5-1-1-06644
Environmental Enforcement Section
P.O. Box 7611 Ben Franklin Station
Washington, DC 20044-7611

and

Water Division, Compliance Section 2
U.S. Environmental Protection Agency - Region 5
Mail Code WC-15J
77 West Jackson Boulevard
Chicago, Illinois 60604

As to the State of Indiana

To the Indiana Attorney General:

Environmental Section
Office of the Attorney General
Indiana Government Center South
5th Floor
302 West Washington Street
Indianapolis, IN 46204

and

To IDEM:

Chief, Compliance Branch
Office of Water Quality
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206

and

Chief, Enforcement Section
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206

As to Defendant:

R. Thomas Bodkin
Bamberger, Foreman, Oswald and Hahn
7th Floor Hulman Building
20 N.W. 4th Street
P.O. Box 657
Evansville, Indiana 47704
812/452-3562
812/421-4936 (fax)

XIV. INTEGRATION AND MODIFICATION

46. This Decree represents the entire agreement of the parties. There shall be no modification of this Decree without written approval of all of the parties to this Decree and the Court.

XV. PUBLIC COMMENT

47. This Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Decree disclose facts or considerations which indicate that the Decree is inappropriate, improper, or inadequate. The Town of Newburgh consents to the entry of this Decree without further notice.

XVI. CONTINUING JURISDICTION OF THE COURT

48. The Court shall retain jurisdiction to enforce the terms and conditions of this Decree and to resolve disputes arising under this Decree as may be necessary.

XVII. CERTIFICATION

49. Any notice, report, certification, data presentation or other document submitted by the Town of Newburgh under or pursuant to this Decree, which discusses, describes, demonstrates, supports any finding, or makes any representation concerning the Town of Newburgh's compliance or non-compliance with any requirement(s) of this Decree shall be certified by a responsible employee or official of the Town of Newburgh.

50. The term "responsible employee or official" shall mean the mayor, town manager, or the sewer system manager for the Town of Newburgh, or any other person who performs similar policy or decision making functions for the Town of Newburgh.

51. The certification of the responsible employee or official shall be in the following form:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

information, including the possibility of fine, imprisonment, or both, for knowing violations. See, e.g., 18 U.S.C. § 1001.

XVIII. WAIVER OF SERVICE

52. For purposes of this civil action, the Town of Newburgh agrees to accept service of process by mail and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to service of a summons.

XIX. TERMINATION

53. This Decree shall terminate within 30 days after all of the following have occurred:

(a) The Town of Newburgh has completed all recommendations set forth in the final audit report required in Paragraph 7 of this Decree;

(b) Subsequent to completion of all recommendations set forth in the final audit report required in Paragraph 7 of this Decree, the Town of Newburgh has maintained compliance with the prohibition on sanitary sewer overflows in Paragraph 8 of this Decree for a period of not less than six consecutive months;

(c) The Town of Newburgh has paid all penalties and interest due under this Decree and no penalties are outstanding or owed to the United States or the State of Indiana;

(d) The Town of Newburgh has complied with all of the reporting requirements in Paragraphs 11-17 of this Decree;

(e) The Town of Newburgh has certified compliance, pursuant to Paragraph 55(a), (b), (c) and (d) and in accordance with Section XVII (Certification) of this Decree, to the Court, the United States, and the State of Indiana; and,

(f) The Plaintiffs have not disputed the certification submitted pursuant to Paragraph 55(e) within 60 days of receiving it. If the Plaintiffs dispute the Town of Newburgh's certification, the Decree shall remain in effect pending resolution of the dispute by the Parties or the Court.

Entered this ____ day of _____, 2005

UNITED STATES DISTRICT COURT JUDGE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States, et al., v. Town of Newburgh, No. _____ (S.D. Ind.).

FOR THE DEFENDANT:

Aug 24, 2003
Date

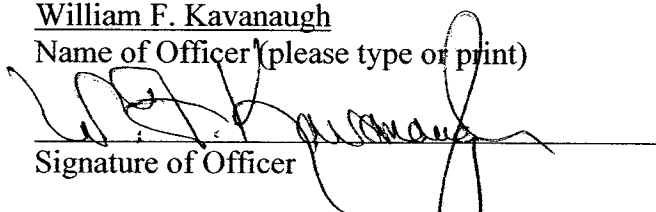
Town of Newburgh
Name of Defendant

P.O. Box 6, Newburgh, Indiana 47629
Address

812-853-7111
Telephone Number

By:

William F. Kavanaugh
Name of Officer (please type or print)


Signature of Officer

President, Newburgh Town Council
Title

If different from above, the following is the name and address of Defendant's agent for service and, if Defendant has counsel, the name and address of Defendant's counsel. Counsel may act as agent for service.

Agent for Service

Attorney

Name

R. Thomas Bodkin
Name

Address

20 N.W. 4th Street, Evansville, Indiana 47704
Address

812-452-3562
Telephone

Defendant shall notify the United States Department of Justice and U.S. EPA of any change in the identity or address of Defendant, its agent for service, or its counsel.

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States, et al., v. Town of Newburgh, No. (S.D. Ind.).

FOR THE UNITED STATES OF AMERICA:

Kelly A. Johnson /
Acting Assistant Attorney General
Environmental and Natural Resources Division
United States Department of Justice
Washington, DC 20530

DATE

Leslie E. Lehnert
Trial Attorney
Environmental Enforcement Section
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

DATE

Thomas E. Kieper
Assistant United States Attorney
Southern District of Indiana


THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States, et al., v. Town of Newburgh, No. (S.D. Ind.).

FOR U.S. EPA:

Granta Y. Nakayama
Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency - Headquarters


DATE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States,
et al., v. Town of Newburgh, No. (S.D. Ind.).



Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency
Mail Code R-19J
77 W. Jackson Boulevard
Chicago, Illinois 60604

DATE 9-30-05



Ignacio L. Arrázola
Associate Regional Counsel
U.S. Environmental Protection Agency
Mail Code C-14J
77 West Jackson Blvd.
Chicago, Illinois 60604

September 23, 2005
DATE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States,
et al., v. Town of Newburgh, No. (S.D. Ind.).

FOR THE STATE OF INDIANA

Thomas W. Easterly
Commissioner
Indiana Department of Environmental Management

DATE

Approved as to form and legality

Steve Carter
Indiana Attorney General

Charles J. Todd
Chief Operating Officer
Office of the Attorney General
Indiana Government Center South
5th Floor
302 West Washington Street
Indianapolis, IN 46204

DATE

United States et al v. Town of Newburgh (S.D. Ind.)
Consent Decree

APPENDIX A

Town of Newburgh, Indiana

Capacity, Management, Operation and Maintenance (CMOM)

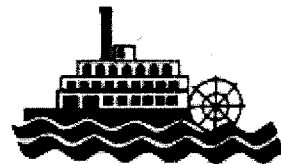
“An Information Management System
for Newburgh’s Sanitary Sewer
System”

• EST. 1803 •

Newburgh

ON THE OHIO

Sister City to Newburgh, England



October, 2002
Revised: July 29, 2005

Prepared By:

**COMMONWEALTH
ENGINEERS, INC.**

7256 Company Drive
Indianapolis, IN 46237

**TOWN OF NEWBURGH, INDIANA
CAPACITY, MANAGEMENT, OPERATION AND MAINTENANCE (CMOM)**

**“AN INFORMATION MANAGEMENT SYSTEM
FOR NEWBURGH’S SANITARY SEWER SYSTEM”**

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EMBEDDED DOCUMENTS

- 2004 OPERATING BUDGET
- 2004 MASTER PLANNING REPORT
- AUDIT FORM – CMOM SELF-ASSESSMENT
- BLOODBORNE PATHOGENS EXPOSURE CONTROL PROGRAM
- BYPASS-OR OVERFLOW INCIDENT REPORT
- COMPLAINT LOG
- CONFINED SPACE ENTRY PERMIT
- CONFINED SPACE ENTRY WRITTEN PROGRAM
- DESIGN AND CONSTRUCTION STANDARDS
- DISCHARGE MONITORING REPORT
- EMERGENCY ACTION PLAN
- EMERGENCY STATION PUMPING
- FINANCIAL MANAGEMENT REPORT FOR CALENDAR YEAR 2004
- FLOW MONITORING REPORT
- FORCE MAIN PRESSURE RUNNING DATA
- GUIDE FOR COLLECTION SYSTEM
- HAZARD COMMUNICATION PROGRAM
- IDEM ADDRESS
- INDUSTRIAL MMR 30530

**TOWN OF NEWBURGH, INDIANA
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- INTERIM REPORT – SMOKE TESTING
- IPEP RECOMMENDED TRAINING DOCUMENT
- LIFT STATION #1 O&M – BBC PUMP & EQUIPMENT COMPANY
- LIFT STATION INFORMATION SHEET
- LIFT STATION PUMP HOURS
- LOCKOUT/TAGOUT PROGRAM
- MAINTENANCE CLEANING
- MANHOLE MAINTENANCE RECORD CARD
- MASTER PLANNING REPORT
- MONTHLY REPORT OF OPERATION (MRO)
- NEWBURGH SYSTEM MAP
- NPDES PERMIT
- NPDES PERMIT NONCOMPLIANCE FORM
- O&M MANUAL
- ON-CALL SCHEDULE
- ORDINANCE – PRETREATMENT NO. 2000-1
- ORDINANCE – RATE – NO. 2002-7
- ORDINANCE – USE – NO. 1987-1
- ORGANIZATIONAL CHART
- CRITICAL PARTS INVENTORY
- PHOTOS
 - CASE BACKHOE
 - ECOSORB DEODORIZING MISTER
 - GENERATORS
 - HARBEN TRAILER MOUNTED JET MACHINE
 - MICROTREL DIALER
 - PORTABLE FLOW METER
 - RIDGID CABLE MACHINE
 - SENSAPHONE
 - SMOKE BLOWER/BOMB
 - TRUCK MOUNTED JET MACHINE
 - TV EQUIPMENT
 - TV INSPECTION EQUIPMENT HOUSING UNIT
- PUBLIC NOTICE
- PUMP MAINTENANCE
- SANITARY SEWER MODELING REPORT
- SCADA
- SEWER CHECK SHEET
- SEWER INSPECTION CARD
- SSO CHAIN OF COMMUNICATION
- STATION CHECK SHEET

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**“AN INFORMATION MANAGEMENT SYSTEM
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- **STATION MATERIAL INVENTORY INDEX**
- **SYNOPSIS OF SAFETY TRAINING PROGRAM**
- **TOWN COUNCIL**
- **UTILITY COMMITTEE**
- **JOB DESCRIPTIONS**
 - **WASTEWATER FACILITIES SUPERINTENDENT**
 - **PLANT SUPERVISOR**
 - **PLANT ASSISTANT SUPERVISOR**
 - **PLANT TEAM LEADER**
 - **PLANT MAINTENANCE TECHNICIAN**
 - **PLANT OPERATOR / LAB TECHNICIAN**
 - **COLLECTION SYSTEM SUPERVISOR**
 - **COLLECTION SYSTEM ASSISTANT SUPERVISOR**
 - **WASTEWATER PUMP STATION O & M SPECIALIST**
 - **COLLECTION SYSTEM O & M**
- **WASTEWATER TREATMENT FACILITY ADDRESS**
- **WASTEWATER UTILITY STAFF**
- **WWTP DESIGN SUMMARY**

**TOWN OF NEWBURGH, INDIANA
CAPACITY, MANAGEMENT, OPERATION AND MAINTENANCE (CMOM)**

**“AN INFORMATION MANAGEMENT SYSTEM
FOR NEWBURGH’S SANITARY SEWER SYSTEM”**

INTRODUCTION

The Town of Newburgh has developed a collection system’s Capacity, Management, Operation, and Maintenance (CMOM) program designed to help optimize the performance of their sanitary sewer system. In accordance with US EPA documents, the major objectives of such a program include:

- a) Manage, operate and maintain at all times, all parts of the collection system so that the Town of Newburgh fully complies with the Clean Water Act.
- b) Establish, in a timely fashion, sufficient capacity to convey base and peak flows without sanitary sewer overflows for all parts of the collection system.
- c) Implement, in a timely fashion, all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows from any portion of the collection system.
- d) Provide timely notification of sanitary sewer overflows from the collection system to all persons with reasonable potential for exposure to pollutants from such sanitary sewer overflows.

It is important to note that there are no piped overflow points within the Town’s sanitary sewer collection system. Therefore, any system overflows are related to sewer line blockages and/or mechanical equipment failure. When either of these events occurs, they are corrected and mitigated in accordance with our emergency response procedures. Generally, these events are not directly related to wet weather conditions.

When utilizing the following document, the reader is advised that all text in blue represents “links” to embedded materials. By clicking on the blue text, the reader is taken directly to the referenced document.

**TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
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A. GENERAL COLLECTION SYSTEM DESCRIPTION

The Newburgh wastewater collection system services the incorporated Town as well as significant adjacent areas. In total, the sewer utility provides service to an area encompassing approximately 16,000 acres of land, serving approximately 8,200 customers. Other significant statistics of the utility are:

- Annual average precipitation: 45.72"
- Miles of gravity sewer: 161 ranging in size from 6" to 24" in diameter
- Miles of force main sewer: 19 ranging in size from 2" to 16" in diameter
- Number of pump/lift stations: 26
- Number of service connections:
 - Residential: 7,757
 - Commercial: 416
 - Industrial: 7
 - Group Account: 1
 - Public Authority Account: 13
 - Sale for Re-sale Account: 1
- Total: 8,195
- Wastewater Treatment Plant (WWTP) design average flow 4.6 MGD
- WWTP peak design flow 14.8 MGD
- NPDES Permit No. IN 0023892
- WWTP design summary

**TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
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B. COLLECTION SYSTEM MANAGEMENT

1. Organizational Chart

General:

A municipal utility of this size requires good organization and competent staff to provide the quality services demanded by the customers. To facilitate this effort, the Town developed an organizational structure designed to be responsive to the needs of its customers while being fiscally responsible at the same time. The attached organizational chart depicts the decision-making hierarchy.

2. Staffing Plan

General:

The wastewater treatment plant is staffed during the hours of 7:00 am to 3:30 pm, seven days a week. The collection system personnel work during the same hours, but only on weekdays. After the normal working hours, there are always two employees on-call covering both the plant and collection system.

All of the collection system lift stations and the wastewater plant are equipped with auto-dialer systems to contact the on-call employees via cellular telephone. To insure quick, reliable notification of a problem, two cellular telephones are rotated between the on-call staff. At the beginning of each calendar year, the Wastewater Facilities Superintendent prepares an on-call schedule. All staff under the Wastewater Facilities Superintendent rotate through the on-call schedule with the exception of the Plant Supervisor and the Plant Operator/Laboratory Technicians. The Plant Supervisor and the Plant Operator/Laboratory Technicians are exempted because they already rotate through weekend duty to provide 7-day per week coverage. The normal rotation for plant staff is to work 8 days with 2 days off followed by working 7 days with 4 days off.

Responsibility Hierarchy:

As is the case for all Towns in Indiana, the Town Council has the ultimate responsibility for all functions performed by employees. In Newburgh's case, they established a liaison position, filled by one of the elected council members and given the title of Utility Commissioner, whose responsibility is to stay abreast of all activities associated with the Sewer Department and to report back to the entire Town Council regarding the Department's activities. This liaison council member, in turn, serves as the chairman of the Utility Committee which meets once per

TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
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month, or more often if necessary, to discuss the business of the sewer utility and make recommendations to the Town Council for official action. The membership of the Utility Committee was established by motion and vote of the Town Council and consists of the Utility Commissioner; an additional, appointed Town Council member; the Town Administrative Manager; the Wastewater Facilities Superintendent; the Utility Office Manager; the Town's attorney; and a representative from the Town's engineering firm.

Specific Staffing:

The Newburgh wastewater utility is managed by a total of seventeen (17) full-time staff members organized by specific duties.

3. Record Keeping

General:

There are a myriad of record keeping activities associated with the operation and maintenance of a wastewater collection and treatment system. Therefore, accurate and complete record keeping is crucial. Equally important are the mechanisms for archiving and retrieving the collected data.

Currently, the Town of Newburgh keeps records on many activities including the following:

Item	Form (Electronic, Manual)	Where Kept	Responsible for Maintenance
Collection System:			
Sewers:			
Sewer atlas, including size and general location of pipe and manholes	Electronic & Manual	Plant	C.S. Supervisor
As-builts drawings of new sewers	Electronic & Manual	Plant	C.S. Supervisor
Inspection reports for new sewer connections	Electronic & Manual	Plant & Sewer Office	C.S. Supervisor & Office Manager
Flow metering information	Electronic	Plant	Superintendent
Smoke testing information	Manual	Plant	C.S. Supervisor
Dye Testing	Manual	Plant	C.S. Supervisor
Physical inspection including manhole inspection and internal televising	Manual	Plant	C.S. Supervisor
Manhole maintenance records	Manual	Plant	C.S. Supervisor
Customer complaint logs	Electronic & Manual	Plant	C.S. Supervisor

TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
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Item	Form (Electronic, Manual)	Where Kept	Responsible for Maintenance
Ordinances:			
Use Ordinance	Manual	Town Hall	Clerk Treasurer
Pretreatment Ordinance	Manual	Town Hall	Clerk Treasurer
Rate Ordinance	Manual	Town Hall	Clerk Treasurer
Confined space entry permits	Manual	Plant	C.S. Supervisor
Bypass/overflow incident reporting	Electronic & Manual	Plant	Superintendent
Sewer maintenance cleaning records	Manual	Plant	C.S. Supervisor
Hydrogen sulfide control	Electronic & Manual	Plant	Superintendent & C.S. Supervisor
Pumping Stations:			
Operation and Maintenance Manual	Manual	Plant	C.S. Supervisor
Preventative maintenance logs	Electronic & Manual	Plant	C.S. Supervisor
Emergency maintenance logs	Electronic & Manual	Plant	C.S. Supervisor
Station setting data (i.e., alarm levels, etc.)	Electronic & Manual	Plant	C.S. Supervisor
Pump discharge pressure data	Electronic & Manual	Plant	C.S. Supervisor
Pump motor run time data	Electronic & Manual	Plant	C.S. Supervisor
Critical parts inventory	Electronic & Manual	Plant	C.S. Supervisor
Station check valve data	Manual	Plant	C.S. Supervisor
Treatment Plant:			
Operation manuals	Manual	Plant	Superintendent
Maintenance manuals	Manual	Plant	Superintendent
Maintenance logs	Electronic	Plant	Superintendent
Noncompliance notification	Electronic & Manual	Plant	Superintendent & Plant Supervisor
Parts listings and spare parts inventory	Electronic & Manual	Plant	Superintendent & C.S. Supervisor
NPDES Permit	Electronic & Manual	Plant	Superintendent
Monthly Report of Operation (MRO)	Electronic & Manual	Plant	Superintendent & Plant Supervisor
Discharge Monitoring Report (DMR)	Electronic & Manual	Plant	Superintendent
Monthly Monitoring Report (MMR)	Electronic & Manual	Plant	Superintendent & Plant Supervisor
Sludge Disposition Report	Manual	Plant	Superintendent

Historically, the system has been set up for manual, hard copy, records. Recently, more and more of this data is kept in digital format. Like most communities of their size, the Town is working on a systematic, electronic database system to keep their records.

**TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
FOR NEWBURGH’S SANITARY SEWER SYSTEM”**

4. Job Descriptions

General:

The following job descriptions have been developed so as to clarify the Town’s expectations of its employees.

- **Job Title:** Wastewater Facilities Superintendent

General Statement of Duties:

- Responsible for the direct and indirect supervision of all wastewater treatment related systems, activities, and personnel.
- Plans, organizes, and provides direction for the operation and maintenance of the wastewater treatment plant and the sanitary sewer collection system.
- Is an active member of the Utility Committee.

- **Job Title:** Plant Supervisor

General Statement of Duties:

- Directs and supervises the routine operation and maintenance of the wastewater treatment plant.
- Plans, organizes, and provides direction for the wastewater treatment plant's analytical laboratory.

- **Job Title:** Plant Assistant Supervisor

General Statement of Duties:

Performs skilled and semi-skilled work in the operation and maintenance of a variety of equipment, instrumentation, unit processes, and unit operations at the wastewater treatment plant.

- **Job Title:** Plant Team Leader

General Statement of Duties:

Performs a variety of routine analyses of water, wastewater, and sludges in support of the wastewater treatment facilities operation. Also monitors and participates in the operation and maintenance of plant processes and equipment.

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**“AN INFORMATION MANAGEMENT SYSTEM
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- **Job Title:** Plant Maintenance Technician

General Statement of Duties:

Performs skilled and semi-skilled work in the maintenance and repair of a variety of equipment, vehicles and facilities at the wastewater treatment plant. Schedules and performs preventative maintenance activities for all equipment and maintains maintenance logs. Maintains inventory and orders routine materials and supplies. Works closely with operations staff to insure equipment servicing and repair will not adversely affect the plant operation.

- Job Title:** Plant Operator / Lab Technician

General Statement of Duties:

Performs a variety of routine analyses of water, wastewater, and sludges in support of the wastewater treatment facilities operation. Also monitors and participates in the operation of plant processes and equipment.

- **Job Title:** Collection System Supervisor

General Statement of Duties:

This position is responsible for the operation and maintenance of the sanitary sewer collection system and supervision of assigned personnel.

- **Job Title:** Collection System Assistant Supervisor

General Statement of Duties:

Performs skilled and semi-skilled work in the operation and maintenance of a variety of equipment, instrumentation, and facilities within the wastewater collection system.

- **Job Title:** Wastewater Pump Station O & M Specialist

General Statement of Duties:

Performs skilled and semi-skilled work in the operation and maintenance of a variety of equipment, instrumentation, and facilities within the wastewater collection system.

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**“AN INFORMATION MANAGEMENT SYSTEM
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- **Job Title:** Collection System O & M

General Statement of Duties:

Performs skilled and semi-skilled work in the operation and maintenance of a variety of equipment, instrumentation, sanitary sewers, and facilities within the wastewater collection system.

- **Job Title:** Administrative Assistant

General Statement of Duties:

Provides administrative support to the Town Administrative Manager in the overall administration of town operations; performs complex, responsible and confidential administrative duties for the Town Administrative Manager, Council members, Chief of Police, Clerk Treasurer, Park Department, Sewer Department, and other departments as requested.

- **Job Title:** Office Manager

General Statement of Duties:

- Plans, organizes, and provides direction for the operation and maintenance of the Sewer Department office.
- Supervises all Sewer Department office personnel
- Supervises, directly or indirectly, all wastewater treatment related accounts payable, accounts receivable, sewer office personnel service records, and the sale of sewer permits.
- Participates as an active member of the Utility Committee.
- Works with developers and contractors on sewer development.
- Works with state permitting agencies.
- Facilitates the payment of bonds and interest.
- Communicates with the Wastewater Facilities Superintendent on any complaints or problems.

**TOWN OF NEWBURGH, INDIANA
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**“AN INFORMATION MANAGEMENT SYSTEM
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- **Job Title:** Clerk / Assistant Office Manager

General Statement of Duties:

Performs accounting and bookkeeping duties. Interfaces directly with water companies supplying Newburgh sanitary sewer customers. Communicates with the Plant Supervisor and Collection System Supervisor regarding customer satisfaction and complaints.

- **Job Title:** AP / AR Clerk

General Statement of Duties:

Performs accounting and bookkeeping duties for the Sewer Department office.

- Job Title:** Clerk (Part-Time)

General Statement of Duties:

Performs office functions that coordinate with the Sewer Department Clerks in the assistance of the Sewer Office Manager.

5. Use Ordinances

General:

Proper control of the Sewer Utility includes establishing appropriate ordinances to provide regulatory/legal authority to insure optimal performance and compliance with pertinent regulatory requirements. Applicable ordinances include 1) a rate ordinance establishing the cost of service, 2) a sewer use ordinance limiting the discharges into the system, and 3) a wastewater pretreatment ordinance to prevent the introduction of pollutants incompatible with the treatment works.

Specifically:

- a) Ordinance No. 1987-1; An Ordinance Controlling Sewer Connections and Waste Water Disposal, Fixing the Schedule of rates and Charges to be Collected by the Town of Newburgh and Other Matters Connected Therewith.

TOWN OF NEWBURGH, INDIANA
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- b) Ordinance No. 2000-1; An Ordinance Establishing Uniform Standards for Issuance of Wastewater Discharge Permits.
- c) Ordinance No. 2002-7; An Ordinance Establishing a New Schedule of Rates and charges to be collected by the Town of Newburgh from the owners of property served by the sewage works of the Town and other matters connected therewith, amending Ordinances No. 1987-1, 1989-8, 1990-30, 1998-1 and 2001-3.

6. Sewer System Mapping

General:

An accurate sewer atlas is a fundamental requirement for any Sewer Utility. This mapping allows staff to do a variety of activities including: 1) answer questions from current and potential customers; 2) visually establish system performance trends; 3) track maintenance activities; and 4) facilitate the orderly extension of sewer service.

Specifically:

Several years ago the Newburgh Sewer Utility commissioned the development of a sewer atlas utilizing an aerial photograph as the base map. An overall index map was created depicting the entire service area and breaking it down into numbered sections for easy location of larger scale, detailed mapping. All of the data is in digital format and the AutoCADD program is used for display. The aerial mapping was used as the base layer with additional layers added to represent the various street names, subdivision names, sewer lines and pumping stations within the system. The base mapping was updated in 2002 to provide coverage for newly serviced areas and to add newly constructed sewers. The scale for the index map is 1" = 500' while each of the individual sub-maps has a scale of 1" = 400'. The sewers and appurtenances are color coded for easy line size and location recognition.

Copies of the sewer atlas are maintained: 1) in the Utility Office located in the Town Hall building, 2) at the wastewater treatment plant, and 3) carried in the vehicles used by the collection system crew. Existing maps are annotated for corrections as discrepancies are discovered. Generally, corrections are made to the original mapping on an annual basis, depicting these referenced corrections and new modifications and/or additions to the system.

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7. Safety Manual

General:

The Town of Newburgh has an extensive safety program to insure that the work environment for the employees is a safe and healthy one. At the same time, the program is also designed to protect the general public during the normal course of operating and maintaining the system. In addition to their general safety standards, the Town has created several specific programs to help protect its employees.

Specifically:

- a) Lockout/Tagout Program – Updated February, 1999

This program was written in conformance with OSHA 1910.147 and established procedures to prevent the unintended release of stored energy which may energize a machine or equipment, causing injury to an employee.

- b) Bloodborne Pathogens Exposure Control Program – Updated February, 1999

This program was written in conformance with OSHA 1910.1030 and was established to adopt universal precautions in order to prevent contact with blood or other potentially infectious materials.

- c) Hazard Communication Program – Updated February, 1999

This program was written in conformance with OSHA 1910.1200 and established to insure that the hazards of all chemicals located in the plant are evaluated and that pertinent information is transmitted to potentially exposed employees.

- d) Confined Space Entry Program – Updated February, 1999

This program was written in conformance with OSHA 1910.146 and was established to insure that employees do not enter potentially dangerous spaces without taking adequate and proper safety measures.

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8. Confined Space Entry Policy

General:

In 1993, OSHA adopted the Confined Space Entry Rule. Supporting documentation for the Rule estimated that 1.6 million workers enter confined spaces annually and predicted that 54 deaths and more than 5,000 serious injuries will be prevented each year as a result of adopting this Rule. The standard is intended to protect workers from toxic, explosive or asphyxiating atmospheres. It focuses on areas with immediate health or safety risk, denoting them as “permit required” spaces. It further requires that employers identify all permit required spaces in their workplaces, prevent unauthorized entry and protect authorized workers from hazards through a permit space program.

Generally, a confined space is defined as an enclosed space having all of the following characteristics: 1) limited or restricted means of entry or exit, 2) large enough for a person to enter, and 3) not designed for continuous employee occupancy. Examples of typical confined spaces include: manholes, sewers, culverts, underground utility vaults, storage tanks, septic tanks, and pits over four feet deep.

Employers are required to instruct all employees, who have to enter into confined or enclosed spaces, as to the nature of the hazards involved, the necessary precautions to be taken, and in the use of protective and emergency equipment required. Although under certain circumstances, a whole host of hazardous conditions can exist in wastewater collection and handling systems, the most common concerns center around: 1) the presence of hydrogen sulfide (H₂S) gas, 2) carbon monoxide (CO) gas, 3) insufficient oxygen in the atmosphere, and 4) the presence of combustible gasses.

Specifically:

The program developed by the Town of Newburgh established a written protocol for: 1) determining if a space is a permit required confined space, 2) the list of required equipment for confined space entry, 3) safe entry checklist, and 4) entry permit for permit required spaces. It further identifies the following permit only entry areas: 1) all manholes, 2) all pumping stations (unless equipped with continuous ventilation that has been confirmed to be operational), and 3) drained digesters and other tanks at the wastewater treatment plant site.

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9. Training Program Documentation

General:

In an effort to insure that the Newburgh Sewer Utility employees have been provided with adequate and proper safety and confined space entry training, the Town has established training goals as outlined below.

Specifically:

The Newburgh Sewer Utility employees have been divided into two groups based upon their daily work assignments and the associated potential for exposure to workplace dangers. Specifically, the Plant Operator/Laboratory Technicians are not exposed to dangers present away from the wastewater treatment plant site. Therefore, recommended training will be designated as appropriate for the Plant Operator/Laboratory Technicians and then all others employees. The Town of Newburgh has worked with the Indiana Public Employers Plan (IPEP) Loss Control Department regarding recommended training for their utility employees.

The Town keeps a written record of the training each employee receives to document this effort.

Additionally, the Town encourages all Collection System employees to obtain the Indiana Water Environment Association (IWEA) Voluntary Wastewater Collection System Operator Certification. In fact, all current collection system personnel, with the exception of one recent hire, have obtained this credential. The Town is committed to continuing education in this area and, as such, they encourage all employees to obtain at least five (5) contact hours per year of continuing operation and maintenance education.

10. Information Tracking

General:

There is a myriad of data collected during the course of running a sewer utility. Such things as: 1) initial construction and as-built data, 2) system operational settings such as pump run controls, 3) routine preventive maintenance requirements and records of maintenance performance, 4) customer complaint logs, 5) emergency maintenance issues, 6) NPDES Permit monitoring and reporting requirements, 7) sewer use, rate and pretreatment ordinances, 8) system monitoring including I/I and SSES investigative work, 9) system improvements and extensions, 10) employee training, and 11) sanitary sewer modeling to predict flows under extrapolated precipitation conditions, etc., all require tracking and archiving.

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11. Collection System Master Plan

General:

Ohio Township in Warrick County is one of the fastest growing areas in the State of Indiana and has been for at least the last 10 to 15 years. Therefore, the Town of Newburgh, which provides sewer service to much of this area, decided many years ago that routine master planning was fundamental to the orderly growth and development of their utility. The most recent complete update of this document was completed in August of 1999. Although conventional 20-year forecasting techniques were utilized, the report recognizes that due to the dynamic nature of the growth in the area, it will likely be necessary to update this planning document at least every 5 years. In fact, the 5-year update was completed in February of 2004.

Specifically:

The specific purpose of the master planning effort is to undertake engineering analyses to: 1) determine the existing capacities of the Newburgh Sewer Utility's collection and treatment system, 2) document deficiencies from either regulatory or performance perspectives, 3) project future needs, both short and long-term, and 4) estimate associated capital expenditures and their impact on user rates to insure that adequate financial resources are available to operate, maintain and expand the system.

Inasmuch as the majority of the customers of the Newburgh Sewer Department reside outside the corporate limits of the Town of Newburgh, the first step of the planning effort is to establish the planning area limits. The Town, based upon input from their Utility Superintendent, Attorney and Engineers, established the potential service area. The next step is to look at historical population growth/development trends to project future needs. Next, alternative means of meeting the anticipated needs were screened and costs developed for each alternative. Finally, recommendations were developed including anticipated costs and project timing to facilitate planned, orderly improvements to the system. This Master Plan envisioned improvement projects every year and specifically identified those for the next 10 years or so.

It is also the standard practice of the Town to recommend an annual reconsideration of projects and priorities before embarking on the projects proposed for that year. New issues come along and may force the reprioritization of efforts. The dynamics of this process continue to direct limited resources to the areas of greatest need.

The 2004 Master Plan update utilized the hydraulic sewer model to identify capacity limitations in the major sewer interceptor lines. Specifically, using a color-coded scheme, the lines were divided into green, yellow and red. The green lines represent those with adequate capacity; yellow lines with marginal capacity where caution has to be exercised (perhaps requiring flow metering to confirm capacity availability); and red lines where limited, if any, additional flow

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should be added. Specifically, this study identified the anticipated future loading on the west side of the system and determined that without improvement, several sewer reaches would be at or over capacity. To prevent this, the West Side Master Lift Station Project was conceived and is currently under construction. Once complete in early 2006, the modeling predicts that the anticipated future loading can be readily handled with all interceptors showing in the green.

12. Program Audits

General:

The previous section outlined a good example why program audits are absolutely necessary to optimize any utility operation. If the 1999 Master Plan and the 2004 update were blindly followed, then significant issues that have surfaced since the development of the planning document would have been ignored. It only makes good sense to periodically review (audit) program goals, objectives and performance on a routine basis and then make modifications as appropriate.

Specifically:

According to the United States Environmental Protection Agency (US EPA), the “purpose of capacity, management, operation, and maintenance (“CMOM”) programs is to optimize labor, materials, money, and equipment. In other words, the goal of such programs is to manage the system’s human and material resources as effectively as possible while achieving regulatory compliance and delivering a high level of service to customers.” Since regulatory compliance is one of the objectives of this program, it stands to reason that the regulatory agencies would develop audit protocols in an effort to insure program optimization. In this case, it is anticipated that a regulatory audit will be performed annually. Said audit will be conducted by the Utility Committee in the first quarter of the following year to facilitate access and use of all year-end reporting and will include the annual report required by the consent decree. As part of the audit, we will include an SSO trend analysis which shows results for the past three (3) years. This audit will also include an annual update of the prioritized capital improvements project listing.

The Town intends to generally conform to the January, 2005 “Guide For Evaluating Capacity, Management, Operation, And Maintenance (CMOM) Programs” published by the US EPA.

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C. COLLECTION SYSTEM OPERATION

1. Operation Budgeting

General:

At the beginning of each year, the Town Administrative Manager meets with the Wastewater Facilities Superintendent and the Office Manager to review the financial situation of the utility. The cash balances of the various accounts are analyzed and the projected expenditures, both maintenance and capital, for the year reviewed. Projects are prioritized and work schedules prepared. In the event that the magnitude of critical capital expenditures are larger than the available cash, then the process of applying for funding or selling bonds is initiated. Annually, a management report is prepared by the Utility's Certified Public Accountants assessing the financial condition of the Utility and revenue generation capability of the current fee structure versus the defined financial needs.

Specifically:

The most recent Management Report for the Newburgh, Indiana Municipal Sewage Works is dated February 17, 2005 and covers the 2004 calendar year. In fact, comparable information including budgets from the Utility is provided for the prior two years (2003 and 2004) as well.

As mentioned in section A. 11., the Master Planning Report for the Wastewater Collection & Treatment Utility includes an Implementation Schedule (Table A) summarizing the prioritized capital improvements project listing with anticipated construction dates. At the beginning of each year, the list is reviewed to determine if the prior years projects were completed so that focus can be directed to those delineated for this year. If project slippage, new projects or a reprioritization has occurred, then schedule readjustment is accomplished and the anticipated construction for the current year planned.

Routine preventive maintenance activities are budgeted through staffing requirements and recurring maintenance expenses.

2. Permit Compliance

General:

The Town of Newburgh operates under a National Pollutant Discharge Elimination System (NPDES) Permit, which establishes discharge limits from the treatment facility and identifies the required monitoring and reporting. This reporting data is submitted to the Indiana Department of

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Environmental Management (IDEM), on a monthly basis, and entered into a computer database for evaluation. Compliance issues are evaluated for severity, and appropriately handled.

Specifically:

The Town’s Sewer Utility is required to submit two reporting forms on a monthly basis. The first is the Discharge Monitoring Report (DMR), which is a United States Environmental Protection Agency (US EPA) prescribed form that focuses on the plant discharge. This report is submitted to IDEM, which in turn performs the data entry into the US EPA database, referred to as the Permit Compliance System (PCS). The second monthly report, entitled the Monthly Report of Operation (MRO), is submitted to IDEM, but this report looks at the entire plant process and not just the effluent.

In the event of a sewer system bypass, IDEM requires that a Bypass/Overflow Incident Report form be FAX’ed to the agency within 24 hours. This is also noted in the comment section of the MRO.

IDEM reviews the DMR data and produces a Quarterly Non-Compliance Report (QNCR) in accordance with US EPA requirements. Based upon this report and input from IDEM staff, they in turn develop a Significant Non-Compliance (SNC) report which requires action by the agency and ultimately, the affected community. Depending on the severity of the matter, IDEM may issue a violation letter or if the compliance issue is deemed to be more severe, they may refer the matter to the Water Enforcement Section of the Office of Enforcement for administrative action.

3. Monitoring

General:

The very nature of the wastewater collection system (buried with little exposed infrastructure) poses difficulty with monitoring system performance. Unless there is an overflow in a public location or a customer makes a complaint, it is not readily evident that a problem exists. Therefore, it is imperative that a sewer utility develops a routine, regular monitoring program to locate potential problems before they manifest themselves.

Specifically:

The major components of the wastewater collection system include the gravity sewers, the lift stations and the force mains. Each component requires a monitoring program and each program is different.

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Unlike the pressurized sewers in the system, there are no easy means to monitor gravity sewer operation. The Town owns two portable flow meters that can be installed in the gravity portion of the collection system to monitor flow at points within the system. This data can be compared over time for significant changes. In 1995, the Town commissioned an extensive flow metering study, breaking the collection system into 21 sub-systems. One of the main purposes of this study was an effort to locate sections of the system prone to excessive infiltration/inflow (I/I). Another reason for the study was to gather data to assist in the development of a computer model of the sewer system. All of this data is used to help locate problem areas prone to excessive I/I and monitor sub-system flows for capacity purposes.

Once a suspected problem sub-system is located, additional evaluation is required to pinpoint the problem(s). To assist in this, the Town has purchased all necessary equipment to smoke test sections of sewer pipe looking for potential inflow sources and to internally inspect these pipe reaches via closed circuit television looking for defects resulting in I/I. One final tool employed by the Town is the use of dyed water flooding to verify inflow sources. All of these techniques are used periodically, as the appropriate need is identified.

There are 26 lift stations within the Newburgh wastewater collection system. Each of these stations is equipped with an automatic dialer system capable of notifying the collection system staff of a problem. In general, there are alarm conditions for high/low water levels and power failure. If one of these conditions exists, the automatic dialer makes an alarm call to the staff during regular business hours or to the on-call staff via cellular telephone. Additionally, there are two physical inspections per week of each of the lift stations. During those inspections, overall conditions are inspected and notations of pump run time and force main pressure are made. This data is monitored over time to observe changes that might suggest the beginning of a problem.

It is the goal of the Sewer Utility to provide standby power at each of the major lift stations (Numbers 1, 2, 3, 5, 8 and 12). To date, this has been completed at stations 1, 2, 3, 5 and 8. Lift station #12 is scheduled for the next 5 to 10 years. The generators are programmed for a test run every Tuesday morning between 9:00 am and 10:00 am. They are set to run for 15 minutes and generally operations staff witnesses the test.

Twice annually, all of the air relief valves on the system force mains are inspected to insure proper operation.

The wastewater plant is equipped with a state of the art Supervisory Control and Data Acquisition (SCADA) system. This system monitors all plant operations and is programmed with over 200 alarm conditions. In the event of an alarm condition after normal working hours, the SCADA system sends a signal to an automatic dialer to contact the appropriate on-call staff. In addition, there is a back-up alarm on the Sequential Batch Reactors (SBRs). Any time there is an SBR programmable logic controller (PLC) alarm condition, an independent automatic

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dialer will contact the on-call staff. As mentioned previously, there is a back-up on the main plant lift station (#3) in the form of the automatic dialer, separate from the SCADA system that is hardwired with its own phone line to facilitate off hours call out.

4. Operation and Maintenance (O&M) Manuals

General:

The O&M Manual is prepared to provide specific guidelines to operating staff to help in attainment of regulatory permit requirements and top efficiency in the operation and maintenance of the various facilities in the system.

Specifically:

The Newburgh Sewer Utility maintains a complete set of O&M Manual books for every lift station and the wastewater treatment facility. These are maintained at each respective station and at the treatment facility and organized for quick access.

A typical lift station O&M Manual is comprised of detailed information on the specific equipment installed in the station including: performance data; parts listings and scheduled maintenance programs; trouble shooting tips; and a list of operating/alarm set points. As mentioned previously, the Sewer Utility has installed taps on all lift station discharge lines to facilitate the collection of discharge pressure readings. This data can be compared to the pump discharge curve to confirm proper pump performance.

5. Safety Program

General:

Wastewater utility personnel are subject to bodily injury just as workers are in all industry. However, the wastewater industry also has a high potential for accidents from noxious gases, bacteria, and viruses. Therefore, anyone engaged in the operation of a wastewater collection and treatment system must be familiar with safety practices that pertain specifically to this profession.

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Specifically:

As previously referenced, very specific training is needed for employees working for a wastewater utility. There is, of course, the need for training in the normal hazards associated with the general construction industry such as backhoe/loader use, basic electrical safety, fall protection, flagger safety, ladder safety, etc. Additionally, there are also several areas requiring specialized training including: bloodborne pathogens, chlorine safety, material safety data sheets (MSDS), confined space entry, hydrogen sulfide hazards, and general treatment plant safety.

Section 8 of the Town of Newburgh Wastewater Treatment Plant O&M Manual specifically addresses the safety program. This document also references several excellent reference publications that can be used to augment the safety training program.

6. Emergency Preparedness

General:

Effective emergency management planning requires considerable coordination and forethought. There are various types of emergencies and/or disasters that can have a very negative impact on the operation of a sewer utility. In February of 1999, the Town of Newburgh adopted the Emergency Action Plan for Employees of the Town of Newburgh. This document, patterned after OSHA Standard 1910.38, is designed to protect the Town and/or its employees from serious injury, property loss, or loss of life in the event of a major disaster.

Specifically:

Emergency preparedness for the Sewer Utility takes on another dimension in that continued utility operation also comes into play. One of the most common emergency events is an electrical power outage. Most wastewater treatment facilities, including Newburgh's, are equipped with a standby generator capable of powering the essential plant equipment to insure that proper treatment continues even during the outage. In fact, the Newburgh facility is equipped with an automatic transfer switch, which signals the generator to start even after normal working hours. Section 7 of the Newburgh O&M Manual is devoted to "Emergency Plans and Operating Procedures".

With 26 lift stations throughout the collection system, it is also crucial that some means exist to keep the wastewater moving toward the treatment facility. Previous sections of this document have discussed the existence of standby generators at some of the key lift stations and plan to add standby power to others in the relatively near future. Additionally, the Town has begun the process of equipping each lift station with the necessary fittings to facilitate the connection of a

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portable, bypass pumping unit which can be moved throughout the system to relieve sewage backup during an extended outage. In this manner, sewerage service can be maintained during this emergency event. Additionally, Utility personnel have identified the anticipated overflow points that will likely occur during extended power outages. These points are prioritized and monitored, as appropriate, to try to prevent an actual bypass/overflow incident.

Emergency overflows can represent another significant event requiring quick action on the part of the Sewer Utility. The Utility has established the following procedures for just such an event:

a) Minor Overflow in Sewer Main

When faced with this situation and unless there is direct surface evidence to the contrary (sink hole in street), the collection system personnel assume that there is some type of line blockage and the jet cleaning machine is used to clean the sewer. If that effort is unsuccessful, the portable pump is used to pump around the blockage and mitigate the overflow event. At the same time, the internal closed circuit television equipment is used to inspect the line to determine the exact nature of the obstruction. If more aggressive cleaning or root removal won't solve the problem, emergency underground utility locates are requested and the area is excavated to make the necessary repair.

b) Significant Overflow in Major Interceptor

The above-referenced protocol still applies with the exception that the Utility's portable pumps will be augmented with rental equipment, available locally, to increase the total pumping capacity so as to handle the flow and eliminate the overflow.

c) Force Main Break

A force main break adds yet another dimension in that the distance to a structure suitable to receive the effluent from a bypass pumping operation generally exceeds the amount of discharge hose that can be practically connected. In this case, the Utility will call in tank trucks to receive the wastewater and transport around the break to the closest available receiving point. An excavated repair is initiated immediately.

Another emergency specific to a sewer utility is the possibility of an illegal industrial discharge. This type of emergency has been subdivided into three classes of illegal discharges, depending on the severity of the event. Regardless of which type emergency condition presents itself, one of the first activities is an effort to locate the source of the pollution and to insure that its

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discharge is discontinued. Once determined, if possible, appropriate enforcement actions will be initiated (in accordance with provisions provided by Ordinance No. 2000-1 – An Ordinance Establishing Uniform Standards for Issuance of Wastewater Discharge Permits).

a) Localized Discharge Contained in a Lift Station

Once containment has been confirmed, a quick analysis is performed to determine if the material is toxic to the wastewater treatment process. If it can be classified more as a nuisance (like a relatively small quantity of oil and grease), the decision may be made to continue normal operation and let the plant treat the material. If the material is deleterious (or even thought to be so), then portable pumps or a vacuum truck will be used to collect the material and load it in a tank truck for proper disposition. If it is ultimately determined that the plant can handle the material, the tank trucks would discharge it to the sludge transfer station at the treatment plant where it will be directed to an isolated tank (the “E” tank) for appropriate treatment.

b) Non-toxic Discharge that Reaches the Treatment Facility

In the event that an illegal discharge reaches the treatment facility, and it is found to be non-toxic to the plant biomass and it doesn’t significantly impact the process equipment, then it is allowed to proceed through the process train. If it is determined that dilution is best, it may be temporarily diverted to the “E” tank for controlled release through the process.

c) Toxic Discharge that Reaches the Treatment Facility

In the event of a toxic or equipment impacting discharge, the most important thing is to detect it early so that the water can be diverted to the 1.1 million gallon “E” tank and remain isolated from the main plant flow. If that is successfully achieved, there is time to fully analyze the waste and determine the appropriate treatment and disposal of the material. If it enters the SBR’s, then hopefully it will be discovered quickly so that it can be contained in one of the reactor vessels. Again, if it is contained, then it can be handled as above. The worst case occurs when the discharge goes undiscovered and impacts the active plant biomass. At that point, the material has to be properly removed and the startup of the plant reinitiated.

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7. Sanitary Sewer Overflow (SSO) Notification

General:

The Town continues to be very proactive in working to prevent releases of sewage into the environment. However, it is not possible to prevent all such events, and therefore, the Town has adopted the Chain of Communication for Reporting Sanitary Sewer Overflows which outlines the following public notification protocol:

- a) Contact IDEM and the US EPA, utilizing the “Bypass/Overflow Incident Report”, within 24-hours of the event.
- b) Contact the Warrick County Health Department, utilizing the same report form, so they can initiate their response protocol.
- c) Post sign(s) at the site of a release event immediately upon discovery and confirmation of such an event and leave them up for up to one (1) week after the source of the release has been corrected.

The “Bypass/Overflow Incident Report” will contain the following information:

- a) the location of the SSO;
- b) the receiving water, if any;
- c) an estimate of the volume of the SSO;
- d) a description of the sewer system component from which the release occurred, including, but not limited to, manholes, constructed overflow pipe, and pipe cracks;
- e) the estimated date and time when the SSO began and stopped or will be stopped;
- f) the cause or suspected cause of the SSO;
- g) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the SSO and a schedule of major milestones for those steps; and
- h) steps taken or planned to mitigate the impacts of the SSO and a schedule of major milestones for those steps.

8. Modeling

General:

One of the most significant tools available to assist in the operation of a modern sewer utility is a computer model. This model facilitates the location of system bottlenecks and the simulation of future improvements and their impact on existing, downstream infrastructure. With this model, it

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is possible to predict what will happen to the system when a new development comes on-line or when a significant improvement is made.

Specifically:

The Town of Newburgh commissioned the creation of a sanitary sewer model for their Sewer Utility, which was completed in September of 2001. A computer program known as XP-SWMM 2000 was utilized and the hydraulic model created with the dual purpose of:

- a) Simulating flows in the existing system under varying conditions to identify probable causes and solutions to existing problem areas and
- b) Evaluating the effect on the sewer system of potential modifications designed to reduce or eliminate existing collection system problems or to provide for future flows.

The SWMM program is a hydraulic model used to simulate flows through networks of links and nodes representing manholes, weirs, pumps, pipes and other elements of a real collection system. It is a dynamic model that can simulate flows at any given time from various sources, including storm water runoff, groundwater, infiltration and domestic, commercial and industrial (DCI) sewage. Generally, only sewers 15 inches in diameter and greater were included in the model.

The result of this effort was the generation of a series of recommendations designed to improve and/or correct current system deficiencies. Since that time, the Town of Newburgh has proceeded with a \$4 million dollar improvement project to follow through with the recommendations made in this report.

Inasmuch as significant changes have been, and are currently being, made to the collection system and the fact that the flow metering data, which served as the basis for the 2001 hydraulic model calibration, is now over ten (10) years old, the Town has decided to update the flow metering and system computer model in 2006.

9. Construction Standards

General:

Construction practices in buried utilities are crucial because once the lines are covered it is virtually impossible to check that proper construction techniques were employed. Therefore, two crucial things have to be done to insure that a quality product is installed. The first is the adoption of uniform design and construction standards for the Sewer Utility. The second is a consistent thorough inspection program to insure compliance with those standards.

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Specifically:

The Town of Newburgh adopted uniform standards in April, 1997. These standards, entitled “Sanitary Sewer Design and Construction Standards” have been reviewed and updated several times since their initial adoption. The purpose is to establish a protocol for the design and construction of improvements to the Newburgh sewer system. The standards start at the beginning with the approval process for new construction and carry through the formal acceptance of the new infrastructure.

The Town of Newburgh obtained permission through IDEM to issue its own construction permits (pursuant to 327 IAC 3.1). Therefore, the Town’s engineering consultant reviews all proposed plans and specifications for conformance with the Town’s standards. Authorization to commence construction is not received until the engineer finds the plans acceptable.

One critical component of this process that is often overlooked has to do with the private laterals serving individual residences. Recent data have shown that this pipe can be a major source of I/I unless properly installed. This is where inspection is critical. The Sewer Utility conducts inspections of all house laterals before they are allowed to connect to the system. Additionally, the Utility or its engineering consultant provides inspection services on all new sewer construction. These inspections help insure that the construction standards are met and that a quality product is ultimately accepted by the Town.

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D. COLLECTION SYSTEM MAINTENANCE

1. Maintenance Budgeting

General:

The issue of budgeting was covered under the Collection System Operation section. The Town does not segregate their budget between operations and maintenance.

2. Planned and Unplanned Maintenance Program

General:

Maintenance is the key to the continued, long-term success of the utility. Without proper maintenance, service disruptions and even NPDES Permit violations will ultimately occur. Additionally, costs of service will increase because: 1) improperly maintained equipment will not last as long and have to be replaced more frequently, 2) payment of damage claims when there are residential sewage backups, and 3) payment of regulatory fines for permit violations.

The primary goal of this CMOM is to develop a program to help insure optimal operation of the utility.

Specifically:

Routine maintenance for the collection system consists of two basic activities, namely: 1) maintenance cleaning of sewer line sections that are known to have periodic blockage/plugging and 2) lift station maintenance. Relative to the sewers, preventative maintenance consists of a variety of activities outlined on a checklist. Maintenance line jetting is scheduled quarterly and there is a log maintained indicating the areas that require this activity and the dates that it was performed. In addition, a separate log documents the use of the jet cleaning truck and the particular data concerning each cleaning activity. System manholes are targeted for a physical inspection at least every 5 years and a log is kept documenting the activity. Most of the rest of the activities are performed on an as-needed basis.

Lift station maintenance is scheduled on a regular basis. The stations themselves are inspected at least twice each week for general operation and then on a less frequent basis, a more thorough evaluation is made. Based upon these inspections, a history is developed for each lift station in the system. Additionally, there is a pump maintenance log to record all activities specific to the pumps themselves. Relative to the standby power sources located at key lift

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stations, all preventative maintenance is handled by an outside contractor. The contract specifies quarterly checks with routine maintenance scheduled every six months.

Unscheduled maintenance, not identified by staff, generally comes in as a customer complaint. The Utility maintains a Complaint Log of every complaint received. The log includes a staff evaluation of the situation and the corrective action to resolve the problem. If the complaint includes a system bypass/overflow event, then the previously referenced incident report is completed and submitted, as appropriate to the regulatory agencies.

Maintenance activity protocols at the wastewater treatment facility, both scheduled and emergency, are covered in detail in the plant O&M Manual which was completely updated and revamped in 2001 at the completion of the most recent plant expansion.

3. Portable Emergency Equipment

General:

There are many tools and lot of equipment needed to properly operate a wastewater collection and treatment utility. This equipment includes items not only to make the physical improvements, but also to insure the safety of the employees.

Specifically:

Proper maintenance requires access to the necessary materials and equipment. The Sewer Utility owns the following maintenance equipment:

- a) Truck mounted jet machine capable of discharging 15 gpm at 4,000 psi. This machine is backed up by the trailer mounted jet machine.
- b) TV inspection van including main line, tractor propelled color CUES camera and a black and white push camera for laterals.
- c) Cable cleaning machine good on lines up to 8" in diameter.
- d) Two trailer mounted, diesel pumps. The 6" pump is equipped with a direct drive while the 4" pump is hydraulic. There are also three, 3" trash pumps.
- e) Two smoke testing blowers with appurtenances.
- f) Backhoe.

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The Town has an ongoing agreement with a local sewer contractor to handle any repair work that requires equipment and/or skills beyond the capability of their utility.

4. Sewer Inspection and Cleaning

General:

As previously discussed, the Sewer Utility owns and operates the equipment necessary to perform internal sewer cleaning and conduct televised inspections. The only equipment not owned by the Utility is that necessary for heavy cleaning of larger sewers. If and when this becomes necessary, the Utility retains the services of an outside contractor to perform the work.

Specifically:

Each year, Town employees internally clean and inspect approximately 40,000 feet of sewer lines. In this manner they are constantly monitoring the condition of the lines and targeting appropriate corrective action for problem areas.

Maintenance cleaning is routinely performed on about 50 reaches of sewer due to problems generally associated with root intrusion or grease buildup. In addition to this, cleaning is performed on an as-needed basis.

5. Hydrogen Sulfide Monitoring and Control

General:

The Safety Program section of this document discussed the fact that hydrogen sulfide can be present in the sewer system. This gas is produced by the decomposition of certain sulfur containing materials present in the sewage and in the absence of oxygen. Hydrogen sulfide gas quickly tends to accumulate in the lower sections of the collection system. It smells like rotten eggs and can be detected with a special gas detector.

Specifically:

Generally, hydrogen sulfide (H₂S) gas is produced in long sewage force mains where oxygen depletion occurs. When these force mains discharge into a structure (like a manhole), the gas is stripped and released into the atmosphere creating a dangerous condition for the employees and an often damaging condition to the infrastructure due to the subsequent formation of sulfuric acid.

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Once this gas is detected, a preventative program is established to minimize its creation. The first step is to keep the sewer lines as clean as possible to prevent the buildup of sulfur-containing organic material. Additionally, where possible, the oxygen level in the sewage is elevated to prevent the formation of anaerobic conditions. Both of these activities help prevent the creation of the gas in the first place.

In the event that it is not possible to prevent the conditions suitable for gas formation, chemicals are used to create unsuitable conditions for the bacteria involved in the gas creation. The Sewer Utility utilizes three different techniques to help prevent the sewage from going anaerobic, namely: a) The use of a 50% solution of sodium hydroxide (NaOH) for this purpose. This chemical is fed for about two hours while trying to maintain a pH of 11.0 or higher. In cold weather, this treatment helps eliminate the slime growth in sewers for about 6 months, while in summer it may only last for a month. This method is used in areas where there is insufficient space to locate a chemical storage tank. Presently, it is used at the Blue Lake Lift Station. b) The second method utilizes a nitrate compound (Nitro Nox as supplied by Bio Chem). Chemical feed pumps are used to meter the chemical, stored in above-ground tanks, into the lift station wet wells. The dosage is manually adjusted by using an H₂S meter to measure gas release at the discharge point of the lift station force main. This technique is presently utilized at the Powers Lift Station and the Old Plant Lift Station. Future plans call for treatment at the Victoria Lift Station as well. c) The third method relies on the creation of super oxygenated water to maintain the desired dissolved oxygen level in the sewage. The system consists of a circulation pump, oxygenation cone, and oxygen storage tank. A portion of the wastewater is super oxygenated to over 70 ppm and then mixed with the rest of the sewage flow. The resulting mixture contains more than 10 ppm of oxygen. This oxygen level is gradually depleted as the wastewater is conveyed in the force main, but the level is such that it does not go anoxic before arriving at its destination.

6. Parts and Equipment Inventory

General:

Adequate maintenance relies on the availability of parts and equipment. If a pump is out and the sewage is building up in the wet well, the employees can't wait to find out where they can obtain the necessary parts to accomplish the repair.

Specifically:

The Newburgh Sewer Utility maintains an extensive spare parts inventory. As a general rule, the Town attempts to maintain backup units for most pumping applications. They also have replacement parts for most critical pieces of equipment. The Town's definition of a critical spare part is one that if it fails it may lead to an overflow or serious operational problem, and the Town

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cannot operate without it, and the part cannot be obtained locally within about a 2-hour period, then the Town tries to carry the part in its inventory. Another advantage is that they are situated next to a major metropolitan area with ready access to major parts and repair services.

The Town's lift stations have all been inventoried with regard to basic equipment contents and an extensive parts listing. The parts listing includes items such as bulbs, fuses, motor starters, relays, sensors, heaters, valves, sleeves, impellers, etc. The replacement parts listing includes specific sizes and model numbers for each item as well as the supplier data. The Utility also maintains a complete listing of all parts and supplies in inventory.

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E. SEWER SYSTEM CAPACITY EVALUATION

1. Flow Monitoring

General:

The backbone of the wastewater utility is the system of pipes and pumps needed to collect the wastewater and transport it to a centralized location for treatment. This often-complex network of hydraulic components is in a constant state of change. If there isn't growth going on in the system resulting in changes to its loading characteristics, then age alone may affect the carrying capacity and watertightness of the pipe and or the ability of the pumps in the lift station to continue to operate efficiently and effectively. The best way to stay abreast of the changes in the sewer system loading at various points within the network is the use of portable flow meters to check flows experienced in any given section.

Specifically:

In late 1995, the Town of Newburgh commissioned an extensive flow monitoring program throughout their system. The system is comprised of over 800,000 lineal feet of sewer pipe ranging in size from 6" to 24" in diameter. The system was sub-divided into twenty-one (21) sub-systems and portable flow meters were installed simultaneously in all systems. The Town owns four (4) units of their own, and a consultant provided the remainder. Therefore, even after the study was complete, the Town has the capability to install a portable meter as the need arises.

The primary purpose of this effort was to locate infiltration/inflow (I/I) that was entering the system and robbing line capacity or overloading the network. Based upon this work, it was recommended that the Town perform smoke testing, dyed water flooding and internal televised inspections to pinpoint problem areas. The net result after all of this work was a series of improvements that were recommended to help eliminate I/I from the system.

Although not specifically envisioned at the time of this study, the flow data also proved invaluable during the development of the previously referenced computer model of the system. Specifically, the flow data helped in the model calibration and/or verification efforts. As mentioned previously, the Town intends to obtain new flow monitoring data in the spring of 2006.

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2. Physical Inspection

General:

One of the best ways to monitor any system is through routine physical inspections. You want staff to see the facilities before there are any problems. In so doing, the Town has a baseline for how the system operates under normal circumstances. It may be that due to the alignment of a certain sewer section, the flow in the manhole appears elevated even though it is due to the physical configuration or a hydraulic anomaly. The first time the staff observes it they will check it out, probably even televising the section. Once satisfied that it is merely a peculiarity of the system, they will know that it is “normal” for that section. Then, at a later date, if different conditions exist, they will know that something is amiss.

Specifically:

As described in previous sections, the Town of Newburgh performs routine physical inspections of the sewers and lift stations. These inspections are scheduled and documented. The documentation should include sufficient pictures and tie down locations so that a condition of concern can be readily located again in the future. The pictures are also useful in explaining the problem to officials to justify the expenditure of funds to correct the situation.

This procedure often provides an early indication that something isn’t functioning as it has in the past or as it is supposed to do. Normally, these investigations, after having revealed a potential problem, lead to further investigative techniques designed to help pinpoint the problem. Ultimately, all the information is compiled to identify the problem cause and determine a corrective action.

3. Smoke Testing, Building Inspections, and Dyed Water Flooding

General:

Once a problem is discovered (generally as a result of flow metering or a physical inspection), additional investigation is needed to isolate the nature of the problem. Internal televising is a very time consuming and costly activity. There are a whole host of defects that are not visually apparent. On the TV screen, you may see “lateral” connection to the sewer. On the surface it looks all right, but it may be a direct connection from a downspout. As a general rule, internal televising is useful in locating infiltration sources while the methods discussed in this section are useful in locating inflow sources. That is why other techniques are used. Then, under appropriate circumstances, internal inspection is employed.

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Specifically:

Smoke testing is a relatively inexpensive investigative method useful in detecting many inflow sources such as roof leaders; cellar, yard or area drains; foundation drains; abandoned building laterals; faulty lateral connections; sewer cross connections; and structurally damaged and/or leaking joints.

The Newburgh Sewer Utility routinely uses smoke testing to help locate illegal discharges into the sanitary sewer system. The equipment usually required to conduct smoke testing is: 1) air blower, 2) smoke bombs, 3) camera, 4) sewer plugs, and 5) two-way radios. The smoke bombs are non-toxic, odorless and non-staining. The air blower is used to force the smoke through the section of sewer being tested that has been isolated with the plugs. The camera is used to document the smoke coming out of the ground, catch basins, downspouts, etc. Prior to conducting a smoke testing program, the Town notifies all households in the area to be tested. The fire and police departments are notified as well.

Smoke testing is not effective in sewers with sags or that are flowing full because the smoke can't get through. It is also not effective when the soils surrounding and above the pipe are saturated, frozen, or snow covered. Finally it is difficult to utilize this technique on windy days because the smoke dissipates so quickly that it may avoid detection.

Building inspections are most often used to locate floor drains and sump pumps that may discharge into the sanitary sewer. If there are traps on these lines, then smoke testing will not be effective because the smoke is prevented from escaping and therefore being noticed. A building inspection will reveal the existence of either floor drains and/or sump basins. If present, the inspection has to include a determination of the discharge point for these potential inflow sources. The best time to provide this type of inspection is during construction. It is fairly unusual for either a floor drain or sump basin to be added later, so if they are not present when the structure was built, it is unlikely that they will be added later. Additionally, since they are specifically prohibited in the Town's Sewer Use ordinance, the builder can be readily forced to correct the situation at the time the structure is built. Inspections performed well after construction are more difficult since they rely on the owner to be present to obtain entry.

Dyed water flooding is a technique used primarily to detect and/or confirm I/I sources from down spouts, storm sewer sections, and stream sections. It can also be used to confirm smoke testing results. Specifically, fluorescent, biodegradable dyes are used to color water, which is then introduced into the system to confirm a connection. The presence or absence of the dye in a downstream section indicates the I/I potential.

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4. Internal Televised Inspections

General:

Internal televised inspection utilizes a specially designed, closed-circuit TV camera to observe the conditions in existing sewer lines. The camera is mounted in a casing and traverses through the sewer from manhole to manhole. Newer equipment includes smaller units capable of inspecting house laterals as small as 4” in diameter. Most set ups allow for still photographs to be taken in addition to the recorded VCR TV images.

Specifically:

The Newburgh Sewer Utility owns and operates its own televising equipment. In fact, they own a van that contains all the equipment needed to accomplish the internal inspection of a sewer reach. Whenever a problem is identified that requires viewing the inside of the sewer, the equipment is employed. Additionally, the Utility tries to proactively inspect non-problem sections to determine general pipe condition. In that manner, they can better predict future problems and plan accordingly.

5. Repair/Rehabilitation

General:

After all the investigative work is complete and the nature of a specific problem identified, then a repair has to be initiated. Sometimes, these repairs represent an emergency that requires immediate action to prevent a threat to the health and safety of the residents. Other times, repair of the defective condition can wait for a more convenient time or when funds have been set aside to accomplish the correction. Proper operation of a sewer utility anticipates that both categories of activities will occur and prepares accordingly as described in the previous sections of this document.

Specifically:

All the previous sections of this report document the procedures and equipment that the Newburgh Sewer Utility utilizes in the event of a problem in the system. Known problems are either handled immediately or scheduled as a part of the annual repair program. If the scope of the repair is beyond the capability of the utility, an outside contractor is engaged to perform the repair. Larger projects require engineer prepared plans and specifications followed by public bidding. Emergencies are handled immediately and an outside contractor called in as necessary.

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Non-emergency projects are brought before the Utility Committee for approval and submission to the Town Council of the Town of Newburgh for authorization. In the event of an emergency, the Town Council representative on the Utility Committee is advised and may provide guidance on proceeding with the work. As necessary, an emergency meeting of the Town Council can be held to authorize a repair if it is beyond the authorization capacity of the Town Council representative on the Utility Committee.

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F. PROGRAM SUMMARY

CMOM is an acronym that stands for capacity, management, operation, and maintenance. The purpose of CMOM is to formulate a detailed program to insure the proper construction and operation of a public wastewater utility. The focus of the program is on the wastewater collection system but includes the treatment component as well. This document details all the components of the Town of Newburgh’s sewer utility in terms of physical plant, managerial programs, and operational activities.

Although this US EPA program initiative is relatively new, it is apparent that the Town of Newburgh has been proactive in its approach to operating its utility as evidenced by the fact many of the program components have been routinely performed by the Town for decades. The biggest benefit of this program is that it required the Town to thoroughly document protocols and procedures in an organized, easily usable format.

The election to store this data on an electronic medium allows the Town to maintain most of the pertinent procedures and forms in one place and on one computer compact disc. With disc copies readily available, any elected Town of Newburgh official or authorized staff member can locate desired information such as system mapping, rate and use ordinances, or procedural protocols. Not only is this a useful tool today, but it will be increasingly valuable in the future as we proceed further into the paperless, electronic storage age.